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| APPLICATION NO.                      | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/803,036                           | 03/12/2001  | Richard Croyle       | 367.39780X00        | 8416             |
| 20457                                | 7590        | 06/16/2004           | EXAMINER            |                  |
| ANTONELLI, TERRY, STOUT & KRAUS, LLP |             |                      | THAI, XUAN MARIAN   |                  |
| 1300 NORTH SEVENTEENTH STREET        |             |                      |                     |                  |
| SUITE 1800                           |             |                      | ART UNIT            | PAPER NUMBER     |
| ARLINGTON, VA 22209-9889             |             |                      | 2111                |                  |
| DATE MAILED: 06/16/2004              |             |                      |                     |                  |

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Please find below and/or attached an Office communication concerning this application or proceeding.

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|                              |                 |                 |
|------------------------------|-----------------|-----------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s)    |
|                              | 09/803,036      | CROYLE, RICHARD |
| Examiner                     | Art Unit        |                 |
| XUAN M. THAI                 | 2111            |                 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 25 March 2004.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8 and 10-21 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1, 3-8, 12, 14-18, 20 and 21 is/are rejected.

7) Claim(s) 2, 10, 11, 13 and 19 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040325.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

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## **DETAILED ACTION**

1. This is in response to amendment filed on March 25, 2004. Claims 1-8 and 10-21 are pending in the application.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5, 7 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by KUO (USPN 5940448).

As per claims 1, 5, 7 and 18, KUO discloses the claimed invention including a transceiver interface connectable to a cable (e.g. universal serial bus), the interface including an input for receiving a pair of signals from said cable (e.g. DM and DP signals), and a logic circuit (e.g. 56) connected to the input having a single logic output line, wherein the single logic output line of the logic circuit has a first output state where both signals are below a predetermined level (first data state 0,0 e.g. 0; see fig. 4 @gi) and a second output state where either or both signals exceed the predetermined level (1,1 or 1,0 or 0,1 e.g. 1; see fig. 4 @gi).

As per claims 3-4, 12, 14-15 and 20-21, wherein the first and second states are indicative of a single ended zero state and non-single ended zero state (e.g. col. 1, lines 29-35 and col. 3, line 62).

### ***Claim Rejections - 35 USC § 103***

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-8, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over KUO (USPN 5940448) in view of Farazmandnia et al. (USPN 6625472; Farazmandnia).

As per claims 6-8, 16 and 17, KUO discloses the claimed invention as claimed in claims 1 and 5, except for an application specific integrated circuit which includes a mobile telephony functions. Farazmandnia teaches that it is known to employ an interface on an ASIC that also includes a mobile telephony functions (see col. 5, lines 4-5; col. 6, line 67 and col. 7, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of KUO and Farazmandnia to arrive at the claimed invention, in that Farazmandnia teaches that such connection of the mobile system to a computer system can be made very small, has very low power requirements and is economical to manufacture. Furthermore, it can be used with a variety of general purpose computing systems (see col. 1, lines 58-65).

***Allowable Subject Matter***

6. Claims 2, 10-11, 13 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art combination does not make obvious the combination of a single NOR gate to replace a set of prior art logic such as the Schmidt triggers

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to reduce the number of pins as described in the present invention and claimed in the claims 1 and 19.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Form PTO-892.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to XUAN M. THAI whose telephone number is 703-308-2064. The examiner can normally be reached on Monday to Friday from 8:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



XUAN M. THAI  
Primary Examiner  
Art Unit 2111

XMT